



# The Financial Stability Risk Data Framework:

Data challenges for entity and instrument identification, classification and relationships

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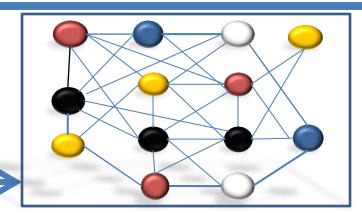
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"We can't solve problems by using the same kind of thinking we used when we created them." — Albert Einstein

## Data challenges for entity and instrument identification, classification and relationships



How can we evolve from a state of data disorder to data order?



Jackson Pollock "Convergence"

#### **Current State of Financial Data**

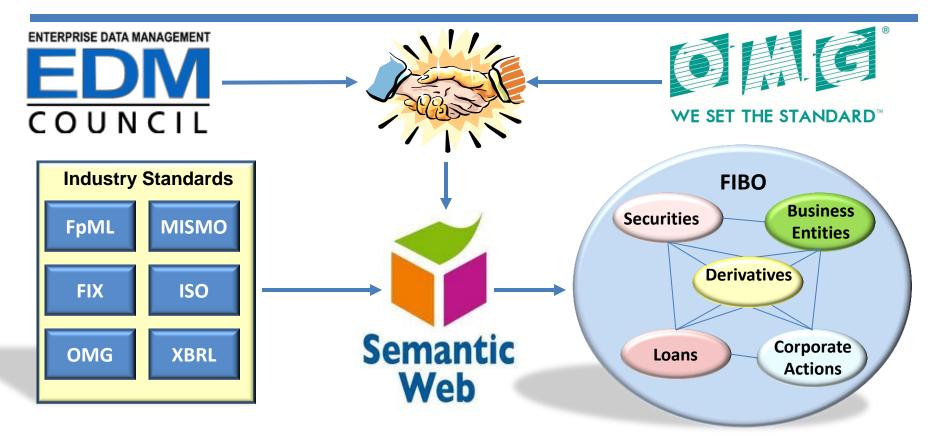
- ✓ Limited data standards
- ✓ Data rationalization problems
- ✓ Data incongruity and fragmentation
- ✓ Opaque data silos limits integration
- ✓ Cryptic codes, programs, brittle
   data schemas and fixed taxonomies

#### **Target State of Financial Data**

- ✓ Pervasive data standards
- ✓ Data precision, clarity, consistency
- ✓ Data alignment and linkage
- ✓ Data integration despite silos
- ✓ Flexible and intelligent data schemas and dynamic classifications

How can we supplement our existing investments in data management to resolve these challenges and achieve these goals?

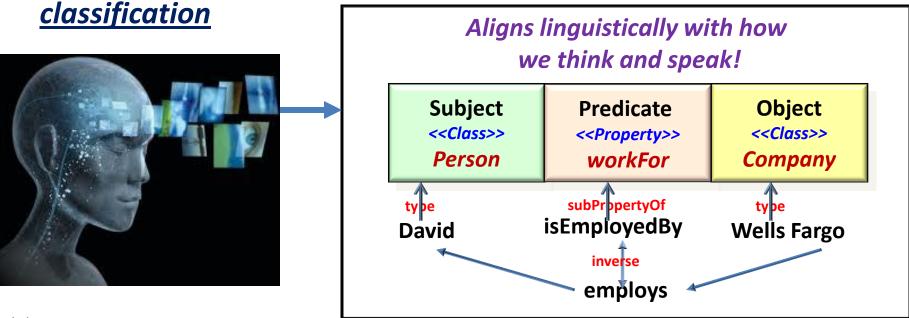
### Financial Industry Business Ontology (FIBO)



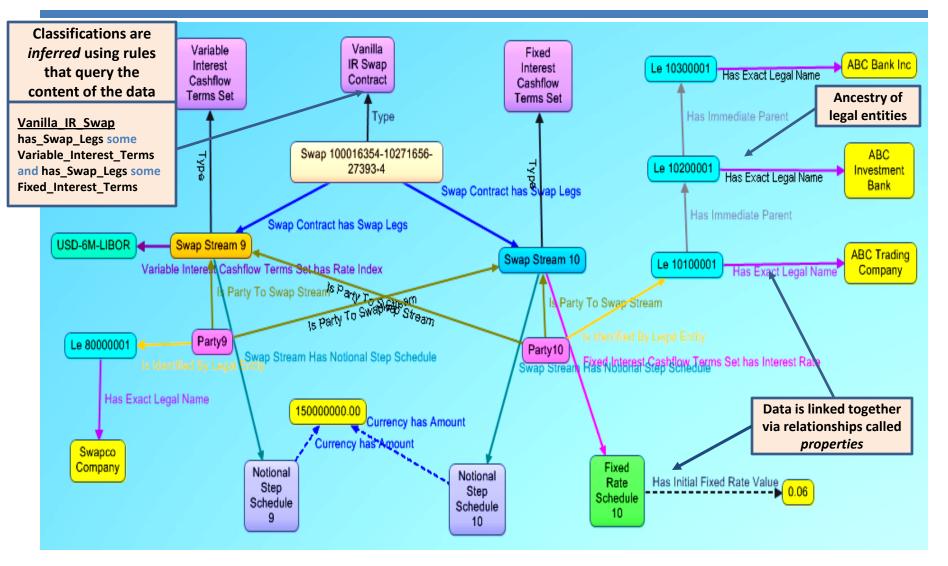
- Industry initiative to extend financial industry data standards using <u>semantic</u>
   <u>web principles</u> for heightened data <u>expressivity, consistency, linkage and rollups</u>
- ■Semantics is <u>synergistic, complementary and additive</u> to existing data standards and technology investments in data management

## What is Semantic Technology?

- $\checkmark$  A data management technology for the 21<sup>st</sup> century that provides:
  - √ a <u>layer of intelligence</u> over disparate data structures that is used
  - ✓ to precisely express the <u>meanings</u>, <u>concepts</u>, and <u>relationships</u> implied by the data
  - √ in ways that both <u>humans</u> and <u>machines</u> can understand
  - √ in order to maximize <u>data organization</u>, <u>integration</u> and



## Semantics can operationally *classify* undifferentiated swaps and show *relationships*



<sup>\*</sup> Gruff 3.0 courtesy of Franz, Inc.

# Invitation to Financial Regulators, Market Authorities and the Financial Industry

- Make the language of financial transactions, instruments and contracts semantically precise and comparable.
  - ✓ Regulators and financial institutions can benefit by formally joining forces to adopt semantic standards for financial risk management
- Demonstrate the practical use of the Financial Industry Business Ontology (FIBO).
  - ✓ A public/private partnership can be created to extend the existing semantics proofof-concept for derivatives into a reference benchmark on how to broadly implement the FIBO standard
- Align the semantics standard with global governance.
  - ✓ Take advantage of the Financial Stability Board's governance work by extending it to also cover the objective of semantic standardization





